In the claims:

1. (previously presented) A method for amplification of at least one nucleic acid, comprising the following steps:

(1) forming at least one nucleic acid template comprising the at least one nucleic acid to be amplified, wherein the at least one nucleic acid contains an oligonucleotide sequence Y at the 5' end and an oligonucleotide sequence Z at the 3' end, and the at least one nucleic acid carries a means for immobilizing the at least one nucleic acid to a solid support at the 5' end;

(2) mixing the at least one nucleic acid template, in the presence of the solid support, with one or more colony primers X, each of which can hybridize to the oligonucleotide sequence Z and carries a means for immobilizing the colony primer to the solid support at the 5' end, whereby the 5' ends of both the at least one nucleic acid template and the colony primers are immobilized to the solid support;

wherein said 5' ends of both the at least one nucleic acid template and the colony primers are immobilized to said solid support such that they cannot be removed by washing with water or aqueous buffer under DNA-denaturing conditions; and

(3) performing one or more nucleic acid amplification reactions on the immobilized nucleic acid template, so that nucleic acid colonies are generated.

2. (previously presented) The method of claim 1, wherein the oligonucleotide sequence Z is complementary to oligonucleotide sequence Y and colony primer X is of the same sequence as oligonucleotide sequence Y.

3. (previously presented) The method of claim 1, wherein two different colony primers X are mixed with the at least one nucleic acid template in step (2) of claim 1, and wherein the sequences of the two different colony primers X are such that the oligonucleotide sequence Z can hybridise to one of the colony primers X and the oligonucleotide sequence Y is the same as the sequence of one of the colony primers X.

4. (previously presented) A method for amplification of at least one nucleic acid, comprising the following steps:

(1) forming at least one nucleic acid template comprising the at least one nucleic acid to be amplified, wherein the at least one nucleic acid contains an oligonucleotide sequence Y at the 5' end and an oligonucleotide sequence Z at the 3' end, and the at least one nucleic acid carries a means for immobilizing the at least one nucleic acid to a solid support at the 5' end;

(2) mixing the at least one nucleic acid template, in the presence of the solid support, with one or more degenerate colony primers X, each of which can hybridize to an oligonucleotide sequence in the at least one template at a site flanking the at least one nucleic acid sequence which is to be amplified and carries a means for immobilizing the colony primer to the solid support at the 5' end, whereby the 5' ends of both the at least one nucleic acid template and the colony primers are immobilized to the solid support;

wherein said 5' ends of both the at least one nucleic acid template and the colony primers are immobilized to said solid support such that they cannot be removed by washing with water or aqueous buffer under DNA-denaturing conditions; and

(3) performing one or more nucleic acid amplification reactions on the immobilized nucleic acid template, so that nucleic acid colonies are generated.

5. (previously presented) The method of claim 1, further comprising an additional step of performing at least one step of sequence determination of nucleic acid templates in one or more of the nucleic acid colonies.

6. (previously presented) The method of claim 5, wherein the sequence determination step involves incorporation and detection of labelled nucleotides.

7. (previously presented) The method of claim 5, wherein the full or partial sequences of nucleic acid templates present in more than one nucleic acid colonies are determined simultaneously.

8. (previously presented) The method of claim 5, further comprising an additional step of visualising the nucleic acid colonies.

9. (previously presented) The method of claim 8, wherein said visualisation step involves the use of a labelled or unlabelled nucleic acid probe.

10. (currently amended) The method of claim 1, wherein the means for immobilizing the at least one nucleic acid template and the colony primers to the solid support comprises means for immobilizing the at least one nucleic acid template and the colony primers covalently to the ~~said~~ support.

11. (previously presented) The method of claim 10, wherein said means for immobilizing nucleic acid sequences covalently to the solid support is a chemically modifiable functional group.

12. (previously presented) The method of claim 11, wherein said chemically modifiable functional group is a phosphate group, a carboxylic or aldehyde moiety, a thiol, a hydroxyl, a dimethoxytrityl (DMT), or an amino group.

13. (previously presented) The method of claim 12, wherein said chemically modifiable functional group is an amino group.

14. (previously presented) The method of claim 1, wherein said solid support to which said 5' ends of both the at least one nucleic acid template and the colony primers are immobilized is selected from the group consisting of latex beads, dextran beads, polystyrene, polypropylene surfaces, polyacrylamide gel, gold surfaces, glass surfaces, and silicon wafers.

15. (previously presented) The method of claim 14, wherein the solid support is glass.

16. (previously presented) The method of claim 1, wherein the density of the nucleic acid colonies is 10,000/mm^2 to 100,000/mm^2.

17. (previously presented) The method of claim 1, wherein the density of colony primers X attached to the solid support is at least 1 fmol/mm^2.

18. (previously presented) The method of claim 1, wherein the density of nucleic acid templates is 10,000/mm^2 to 100,000/mm^2.

19-34 (canceled)

35. (previously presented) The method of claim 1, wherein said 5' ends of both the at least one nucleic acid template and the colony primers are immobilized to said solid support via covalent attachment.

36. (previously presented) The method of claim 4, wherein said 5' ends of both the at least one nucleic acid template and the colony primers are immobilized to said solid support via covalent attachment.